Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. – 2. (Cancelled)

3. (Currently Amended) A hybrid fusion polypeptide, comprising ~~(a)~~ a multivalent immunogenic portion fused to an immunogenic polypeptide carboxy-terminal to the multivalent immunogenic portion, which protects the immunogenicity of the multivalent immunogenic portion, ~~that~~ wherein the multivalent immunogenic portion comprises six immunogenic amino-terminal polypeptides of Group A streptococcal M protein from six different Group A streptococcal serotypes, wherein the immunogenic polypeptide carboxy-terminal to the multivalent immunogenic portion is a reiteration of the immunogenic amino-terminal polypeptide from the amino terminus of the multivalent immunogenic portion, wherein each of the six immunogenic amino-terminal polypeptides is at least 10 amino acids in length; and wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 2, serotype 11, serotype 22, or serotype 28.

~~(b) a carboxy-terminal reiterated immunogenic polypeptide, which is carboxy-terminal to the multivalent portion and is a reiteration of a polypeptide from the amino-terminal region of the multivalent portion.~~

4. (Withdrawn) The hybrid fusion polypeptide according to claim 3 wherein the six different Group A streptococcal serotypes are 1, 3, 5, 6, 19, and 24.

5. – 6. (Cancelled)

7. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 1.

8. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~ claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 2.

9. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 11.

10. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 24.

11. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 19.

12. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 22.

13. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 28.

14. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 wherein the hybrid fusion polypeptide elicits an immune response comprising opsonic antibodies against Group A streptococcal M protein that do not cross-react with human tissue.

15. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to claim ~~1-3~~ further comprising a selectable marker encoded by an expression vector.

16. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to claim 15 wherein the ~~marker encoded by the~~ expression vector is a 6x His-tag.

17. (Withdrawn and Currently Amended) The hybrid fusion polypeptide according to claim 15 wherein the encoded marker binds to nickel nitrilotriacetic acid (Ni-NTA) resin.

18. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~ claim 3 wherein the immunogenic polypeptides of the fusion polypeptide are joined by amino acids specified by a restriction enzyme site.

19. (Currently Amended) The hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3 further formulated with an adjuvant.

20. (Original) The hybrid fusion polypeptide according to claim 19 wherein the adjuvant is alum.

21. (Original) The hybrid fusion polypeptide according to claim 19 further formulated with an immunomodulatory cofactor.

22. (Currently Amended) A composition comprising ~~a~~ the hybrid fusion polypeptide according to ~~any one of claims 1 to 3~~claim 3, and a pharmaceutically acceptable excipient, carrier, stabilizer or diluent.

23. (Currently Amended) The composition according to claim 22 further comprising ~~with~~ an adjuvant.

24. (Original) The composition according to claim 23 wherein the adjuvant is alum.

25. (Currently Amended) The composition according to claim 22 wherein the ~~pharmaceutically acceptable excipient, carrier, stabilizer or diluent~~composition comprises at least one of a buffer, antioxidant, carbohydrate, and chelating agent.

26. (Currently Amended) The ~~fusion polypeptide~~composition according to claim 22 ~~wherein the composition~~ further ~~comprises~~ comprising an immunomodulatory cofactor.

27. (Currently Amended) The ~~fusion polypeptide~~composition according to claim 26 wherein the immunomodulatory cofactor is selected from the group consisting of IL-4, IL-10, γ-IFN, IL-2, IL-12, and IL-15.

28. (New) The hybrid fusion polypeptide according to claim 3 wherein at least one of the immunogenic amino-terminal polypeptides of the fusion polypeptide is from a Group A streptococcal serotype 13.

29. (New) A composition consisting of (a) the hybrid fusion polypeptide according to claim 3 and (b)(i) a pharmaceutically acceptable excipient, carrier, stabilizer or diluent; (ii) a pharmaceutically acceptable excipient, carrier, stabilizer or diluent and an adjuvant;

or (iii) a pharmaceutically acceptable excipient, carrier, stabilizer or diluent and an immunomodulatory cofactor.